



## Smart Fiber Optic Amplifier with Dual Display One-Button Setup 50μs Response for Industrial Automation

Our Product Introduction

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### Basic Information

- Place of Origin: Guangdong, China
- Brand Name: KRONZ
- Certification: CE
- Model Number: BFH-A10P
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Polybag packing
- Delivery Time: 5-8 working days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 pieces per month



### Product Specification

- Output Mode: LIGHT ON / DARK ON
- Power Supply: 12 To 24VDC
- Ambient Humidity: 35 To 85%RH
- Countrol Output: PNP
- Vibration Resistance: 10-50 Hz, Double Amplitude
- Shock Resistance: Approx. 50G (500 M/s<sup>2</sup>)
- Weight: Approx. 20g (main Unit)
- Size: L×W×H: 75×11.2×33.8mm



### More Images



## Product Description

### Advanced Digital Fiber Optic Sensor Amplifier with Intelligent Control

#### Product Description

Discover our state-of-the-art digital fiber optic sensor amplifier designed for precision industrial applications. Featuring revolutionary smart adjustment technology and dual digital displays, this sensor delivers unmatched performance and ease of use in demanding environments.

#### Key Features:

- **Smart One-Button Setup** - Complete configuration with just a single button press
- **Dual Digital Display** - Real-time monitoring and enhanced operational capabilities
- **Intelligent Power Adjustment** - Automatically regulates light emission without compromising response time
- **Ultra-Fast Response** - Selectable response times from 50 $\mu$ s to 1ms for various applications
- **PNP Output** - Maximum 100mA output current with below 2V residual voltage
- **Advanced Protection** - Comprehensive circuit protection including reverse polarity, surge, and overcurrent protection

# KRONZ





NPN	BFN-A10N
Control Output	NPN: External voltage: below 30V DC (between detection output and 0V); maximum output current: 300mA; residual voltage: below 2V
Timer Function / Range	Delay off, delay on, one-shot timer, on/off, on one-shot; adjustment range: 1–9999 ms
Rated Value	NPN: Typical: Maximum 900 mW (max 32 mA at 24V; max 47 mA at 13V)
Mutual Interference Prevention	F0,F1,F2,F3Four-channel interference suppression

## Technical Data

NPN		BFN-A10N
PNP		BFN-A10P
Light Source		Red LED (wave length:630nm)
Response Time		50μs(H101)、250μs(H102)、500μs(H103)、1ms(H104)
Output Mode		Selectable via slide switch: Light-on mode (LIGHT ON) / Dark-on mode (DARK ON)
Protection Circuit		Power reverse polarity protection, Output surge protection, Output reverse polarity protection, Output overcurrent protection
Control Output	NPN	External voltage: below 30V DC (between detection output and 0V); maximum output current: 300mA; residual voltage: below 2V
	PNP	External voltage: below 30V DC (between detection output and +0V); maximum output current: 100mA; residual voltage: below 2V
Timer Function / Range		Delay off, delay on, one-shot timer, on/off, on one-shot; adjustment range: 1~9999 ms
Rated Value	NPN	Typical: Maximum 900 mW (max 32 mA at 24V; max 47 mA at 13V)
	PNP	Typical: Maximum 900 mW (max 36 mA at 24V; max 50 mA at 13V)
Mutual interference prevention		F0、F1、F2、F3Four-channel interference suppression
Real-time Function		Parameter initialization / Key lock / Two-point threshold, full-auto and manual setting / Quick saturation attenuation
Power Supply Voltage		12 to 24VDC $\pm 10\%$ 、Ripple(P-P)10% 以下
Power Consumption		< 870 mw
External Input		Unused / External teaching / Hold / Zero setting / Laser off — switchable
Ambient Light Level		Incandescent light: max 20,000 lux; Sunlight: max 30,000 lux
Ambient Temperature		-20°C to +55°C
Ambient Humidity		35 to 85%RH
Vibration Resistance		10~50 Hz, double amplitude 1.5 mm, 2 hours each in X, Y, and Z directions
Shock Resistance		Approx. 50G (500 m/s <sup>2</sup> ), 3 times each in X, Y, and Z directions
Housing Material		Polycarbonate
Weight		Approx. 20g (main unit)
Size		L×W×H: 75×11.2×33.8mm

Photoelectric Sensors

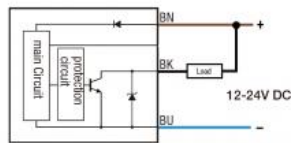


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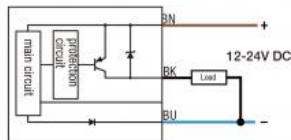
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## Circuit Diagram

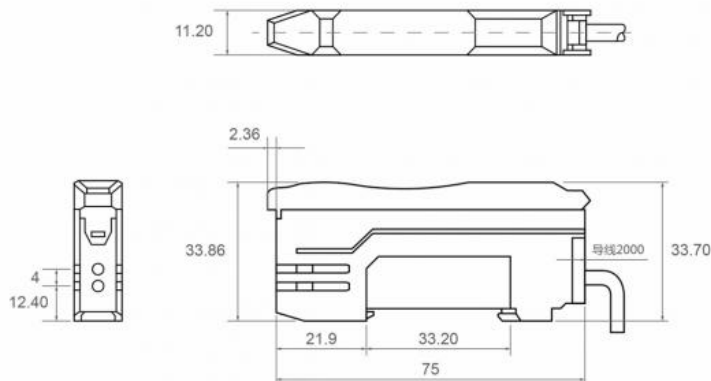
DC NPN Output



DC PNP Output



## Diemnsion



Photoelectric Sensors



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